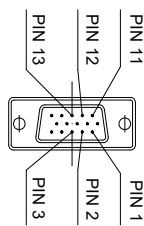
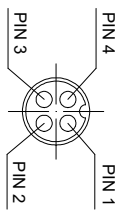


ENCODER RESOLUTION:1000PPR(4000CPR)

15-PIN DB MALE PLUG	1	2	3	11	12	13
DESCRIPTION	EA+	VCC	GND	EB+	EB-	EA-



B VIEW

A VIEW

STEP	A+	B+	A-	B-	CCW	CW
1	+	+	-	-	←	→
2	-	+	+	-	←	→
3	-	-	+	+	←	→
4	+	-	-	+	←	→

FULL STEP 2 PHASE-EX. WHEN FACING MOUNTING END (X)

UNIT mm	PIN NO	BIPOLAR	LEADS
GB/T 1804-M EQV/ISO 2768-1 CLASS M:	1	A+	--
<=6 ±0.1	2	A-	--
>6-30 ±0.2	3	B+	--
>30-120 ±0.3	4	B-	--
>120-400 ±0.5			



SPECIFICATION	VALUE
AMPS/PHASE	4.0
RESISTANCE/PHASE(Ohms)@25°C	0.45±10%
INDUCTANCE/PHASE(mH)@1KHz	1.30±20%
HOLDING TORQUE w/o GEARBOX(Nm)[lb-in]	1.20[10.62]
GEAR RATIO	20
EFFICIENCY	75%
STEP ANGLE w/o GEARBOX(°)	1.80
BACKLASH@NOLOAD(°)	1.6
MAX.PERMISIBLE TORQUE(Nm)	20
MOMENT PERMISSIBLE TORQUE(Nm)	40
SHAFT MAXIMUM AXIAL LOAD(N)	100
SHAFT MAXIMUM RADIAL LOAD(N)	250
AMBIENT TEMPERATURE	-10°C-50°C[14°F-122°F]
INSULATION CLASS	B 130°C[266°F]
TEMPERATURE RISE	MAX.80°C

# OSMTEC®

Stepper Motor Specialists

mm	DRN	LDJ
UNITS	2:3	APVD ZPJ
SCALE	SIGNATURE	DATE

## PLANETARY GEARBOX MOTOR

23HS22-HG20-E1000